



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

July 1, 2016

Via E-mail

Ms. Stacy P. McMahan
Chief Financial Officer
The Spectranetics Corporation
9965 Federal Drive
Colorado Springs, Colorado 80921

**Re: The Spectranetics Corporation
Form 10-K for the Fiscal Year Ended December 31, 2015
Filed February 26, 2016
File No. 000-19711**

Dear Ms. McMahan:

We have reviewed your filing and have the following comment. In our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this comment within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2015

Notes to Consolidated Financial Statements

Note 2 - Business Combinations, page F-16

1. We note that you consummated the Stellarex acquisition on January 27, 2015 but to date you have not filed audited financial statements of the acquired business or pro forma information relating to the acquisition. Please provide us with your calculations of the significance tests outlined in Rule 1-02(w) of Regulation S-X that you used in applying the requirements of Rule 3-05 and Article 11 of Regulation S-X.

Ms. Stacy P. McMahan
The Spectranetics Corporation
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We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comment, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Tara Harkins at (202) 551-3639, or Jay Webb, Senior Accountant, at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Timothy Buchmiller at (202) 551-3635 or Geoffrey Kruczek, Senior Attorney, at (202) 551-3641 with any other questions.

Sincerely,

/s/ Kevin J. Kuhar

Kevin J. Kuhar
Accounting Branch Chief
Office of Electronics and Machinery